TECHNICAL NOTES

LAKE STATES FOREST EXPERIMENT STATION
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Effect of Pruning on the Growth of Red Pine

p to 50 percent of the live crown length can be removed without retarding current nual height and diameter growth of red pine (Pinus resinosa Ait.) according to results of a pruning study in northern Lower Michigan. On the other hand, pruning 70 rcent or more of the crown length definitely retards both height and diameter growth.

leven widely scattered red pine plantations were pruned in the fall of 1950. Select- l crop trees, 10 to 35 feet tall, were pruned to 0, 30, 50, 70, and 90 percent of eir total height. Measurements two growing seasons after treatment indicate that ıder the conditions tested up to 50 percent of the total height of red pine, which as also about 50 percent of the live crown length, can be pruned safely.

he general effect on growth of pruning to different degrees is illustrated in the llowing table for two plantations, 15 and 25 years old, growing on land representave of the better and poorer sites in northern Lower Michigan.

Approximate percent of total height pruned	Live crown removed	Average height 1950	Height growth 1950-52	Average d.b.h. 1950	D.b.h. growth 1950-52
	Percent	Feet	Feet	Inches	Inches
		(Better Site - Age 15)			
0	0	20	4.2	4.4	1.0
30	30	20	4.1	4.8	1.1
50	49	20	3.9	5.0	1.0
70	70	20	2.8	4.5	0.3
		(Poorer Site - Age 25)			
0	0	26	2.7	4.6	0.4
30	15	27	2.6	5.5	0.5
50	37	26	2.6	5.2	0.5
70	66	25	2.2	4.8	0.2
90	86	27	1.7	5.3	0.1

onifers can be pruned for quality growth so as to produce clear standard length logs. nce the growth of young red pine was scarcely affected by pruning to 50 percent of eir height, it appears practical to prune trees 17, 21, 25, 29, and 33 feet tall to able heights of 8, 10, 12, 14, and 16 feet, respectively, with accepted stump and im allowances.

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